

## REMARKS

Applicants have studied the Office Action mailed December 20, 2004 and have made amendments to the claims. It is respectfully submitted that the application, as amended, is in condition for allowance. Reconsideration and allowance of the pending claims in view of the above amendments and the following remarks is respectfully requested.

### Sequence Compliance:

The Examiner stated that the application fails to comply with the requirements of 37 CFR 1.821 through 1.825 because 37 CFR 1.821(a)(2)(c-d) states that each sequence disclosed must appear separately in the sequence listing and in the text of the description and claims whenever described. For example, the appropriate SEQ ID NO must be recited in Figure 1 on page 16.

Applicants have hereby inserted SEQ ID NOS:1 and 2 in the descriptions of Figures 1 and 3 on page 16 of the specification, as indicated above by the amendments to the specification.

### Claim Objections:

The Examiner objected to claims 28-35 for referencing "SNP" without first disclosing the meaning of the acronym.

Applicants have hereby amended claim 28 to fully express the phrase "single nucleotide polymorphism", followed by parentheses around the acronym "SNP", in order to clarify the meaning of the "SNP" acronym recited in claims 28-35.

### Rejection of claims 22-23 under 35 USC §112, 1st paragraph:

The Examiner rejected claims 22-23 under 35 USC §112, 1st paragraph (written description), asserting that no written description is provided in the instant specification as to what structurally constitutes nucleotide sequences "...comprising nucleotides 306168-306503 of SEQ ID NO:1", the boundaries and functional elements of which would be unknown to one skilled in the art at the time the invention was made. The Examiner states that the specification has not described, nor can it be reasonably visualized by one skilled in the art, the structural and functional elements attributable to chromosome 6, which represents the boundaries of the nucleotide sequence as currently claimed. The Examiner states that, for example, chromosome 6

contains other undescribed promoters, coding regions, 5' and 3' flanking regions, exons and introns, each with their own unique structure and function that is not described in the instant specification.

To expedite prosecution, claims 22-23 have been cancelled, thereby making this rejection moot.

**Rejection of claims 20, 30, and 34 under 35 USC §102(b):**

The Examiner rejected claims 20, 30, and 34 under 35 USC §102(b) as being anticipated by Gossman (US patent number 5464758, Nov. 7, 1995, SEQ ID NO:16, figure 10, column 5). The Examiner states that Gossman teaches a polynucleotide and its complementary sequence wherein the polynucleotide comprises 20 contiguous nucleotides of SEQ ID NO:1, wherein the 20 nucleotides include position 306382 of SEQ ID NO:1.

To expedite prosecution, claims 20, 30, and 34 have been cancelled, thereby making this rejection moot.

**Rejection of claims 21, 31, and 35 under 35 USC §102(b):**

The Examiner rejected claims 21, 31, and 35 under 35 USC §102(b) as being anticipated by Strausberg (GenBank Accession AI073549; EST name ov45e08.x1; clone ID IMAGE 1640294; Aug. 6, 1998). The Examiner states that Strausberg teaches a polynucleotide and its complementary sequence wherein the polynucleotide comprises 20 contiguous nucleotides of SEQ ID NO:1, wherein the 20 nucleotides include position 306382 of SEQ ID NO:1, and further wherein position 306382 of SEQ ID NO:1 is 'G'.

To expedite prosecution, claims 21, 31, and 35 have been cancelled, thereby making this rejection moot.

**Rejection of claim 22 under 35 USC §102(b):**

The Examiner rejected claim 22 under 35 USC §102(b) as being anticipated by Shine (WO 87/05049, Aug. 27, 1987, Figure 1, p. 19). The Examiner states that Shine teaches a polynucleotide and its complementary sequence that shares 100% identity with the fragment of SEQ ID NO:1 comprising the contiguous nucleotides from position 306168 to position 306503.

To expedite prosecution, claim 22 has been cancelled, thereby making this rejection moot.

**Rejection of claim 23 under 35 USC §102(b):**

The Examiner rejected claim 23 under 35 USC §102(b) as being anticipated by Strausberg (GenBank Accession AI073549; EST name ov45e08.x1; clone ID IMAGE 1640294; Aug. 6, 1998). The Examiner states that Strausberg teaches a polynucleotide and its complementary sequence that shares 100% identity with the fragment of SEQ ID NO:1 comprising the contiguous nucleotides from position 306168 to position 306503 wherein the nucleotide at position 306382 is 'G'.

To expedite prosecution, claim 23 has been cancelled, thereby making this rejection moot.

### Conclusions

By way of the above claim amendments, claim 28 has been amended, and claims 20-23, 30-31, and 34-35 have been canceled.

As such, claims 18-19, 24-29, and 32-33 remain pending, each of which claims the Examiner indicated (in the December 20, 2004 Office Action) are allowed.

In view of the above remarks and amendments, Applicants respectfully submit that the application and claims are in condition for allowance, and request that the Examiner reconsider and withdraw the objections and rejections. If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is invited to call the undersigned agent at (240) 453-3812 should the Examiner believe a telephone interview would advance prosecution of the application.

Respectfully submitted,  
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